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| Brookhaven National Laboratory/National Synchrotron Light Source | | | |
| Subject: | Beamline Frisk On-the-Job Training (OJT) | | |
| Number: | LS-OPS-0071 | Revision: | B |
| | | Effective: | 4/22/04 |
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*Approval signatures on file with master copy.

[Revision/Review Log](#)

NSLS OPERATIONS COORDINATOR (OPCO)

On the Job Training And Task Qualification Guide

Task Description: Perform a beam line frisk, evaluate the results and take corrective actions.

The following guide is to be used by an OJT Trainer to perform initial training or requalify an OpCo on this task. Following the initial OJT demonstration, the OpCo shall use ***Procedure # LS-OPS-0072*** as an operational guide to performing the task in practice.

| No. | Description Of Performance Item | Acceptance Criteria |
|-----|---|---|
| 1 | Communicate with the beam line contact to verify operating conditions are suitable to perform a frisk. | Beam Line operating conditions are suitable for performing the frisk. |
| 2 | Obtain a copy of the beamline diagram. | Obtain a copy of the beamline diagram. |
| 3 | Obtain a GM instrument from the Control Room cabinet and the check source and source jig from the RCD storage area across from the Control Room. Perform the preoperational checks: <ol style="list-style-type: none"> 1. Physical inspection 2. Verify calibration due date 3. Set the instrument battery test. 4. Perform source response check on the x1 and x10 ranges. | <ol style="list-style-type: none"> 1. Instrument in good physical condition. 2. Calibration sticker is present and due date has not expired. 3. Batteries check in range. 4. The results must be within +/- 20% of expected value. <p>Note: If the instrument fails any of the steps, attach a DO NOT USE tag to the instrument.</p> |
| 4. | Log instrument out of storage. | Instrument log is completed. |
| 5. | Record beam line parameters | <ol style="list-style-type: none"> 1. Storage ring energy and current. 2. Beam line configuration |

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| No. | Description Of Performance Item | Acceptance Criteria |
|-----|--|--|
| 6. | Frisk the beamline or specific component(s) that was presurveyed by RCD. | Position the GM probe with the window facing the beamline at contact and move it at a speed of about 2 inches per second. Compare results to the RCD survey data. |
| 7. | <p>Evaluate the results and determine the need for corrective actions.</p> <ol style="list-style-type: none"> 1. Normalize the measured count rate(s) to 300 mA. 2. Evaluate corrected values. 3. Implement corrective actions. | <p>After recording the as-found cpm correct and evaluate the frisk data as follows:</p> <ol style="list-style-type: none"> 1. Multiply the measured count rate by (300 ÷ beam current). 2. If ≤ 500 cpm on contact, no action 3. If > 500 but $\leq 10,000$ cpm on contact then, inform the Local Contact that level is acceptable to continue running, but minor additional shielding is required. Record this in the OpCo Logbook and promptly inform the Safety Officer. The Safety Officer shall make a determination on continued operation of the beamline. 4. If $> 10,000$ cpm on contact, promptly notify the Safety Officer and shutdown the beamline until RCD is present to conduct a formal radiological survey. |
| 8. | Communicate and file the results of the frisk. | <ol style="list-style-type: none"> 1. Distribute a copy of the completed frisk to the RCD Facility Support Representative. 2. Place the original completed form the Control Room Frisk Book. 3. Make appropriate entries in the OpCo logbook |

Trainer Name (print) _____

| Trainee Name (Print) | Trainee Signature | Date | Trainer Signature |
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